DOCUMENT RESUME

ED 023 762 UD 006 709

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Narrative Description of the N.C. Advancement School, Final Report.

Learning Institute of North Carolina, Durham.
Pub Date 67
Note - 58p.
EDRS Price MF - $0.50 HC - $3.00
Descriptors - *Curriculum Development, Curriculum Research, Educational Finance, *Educational Research, *Grade 8, Inservice Teacher Education, Junior High School Students, Males, Remedial Programs, *Residential Programs, Residential Schools, Testing Programs, *Underachievers
Identifiers - Carnegie Corporation, North Carolina Advancement School, Office of Education, State Department of Education

This report describes a residential remedial school for high potential underachieving grade 8 boys selected from public schools across the state. The school had four terms of two to three months duration each year, and attendance each term averaged about 200 boys and 25 visiting teachers from the same public school systems. The visiting teachers received inservice training in the problems of underachievement. On the basis of demographic and psychodynamic data gathered from its pupils, the school conducted several research studies related to underachievement. In addition, a number of learning programs were "empirically", "intuitively" developed from the direct interaction between students and teachers. These programs and the approach of the school in general were characterized by "experiential" materials and methods wherein relevance to students' needs and interests figured priminently. The effectiveness of the learning programs was demonstrated in a 1966-67 field testing program involving 6,000 public school students. The report includes brief descriptions of some of the learning programs and of the research studies which were conducted. (LB)

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# THE NORTH CAROLINA ADVANCEMENT SCHOOL 1964 - 1967

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*A project of The Learning Institute of North Carolina*

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FINAL REPORT

On The

NORTH CAROLINA ADVANCEMENT SCHOOL

"The Development and Evaluation of a School for High Potential Underachievers"

1964 - 1967

(USOE Cooperative Research Project #H-173)

# *NARRATIVE DESCRIPTION OF THE N.C. ADVANCEMENT SCHOOL*

Submitted To: The United States Commissioner of Education

The North Carolina State Board of Education

Carnegie Corporation of New York

Submitted By: The Learning Institute of North Carolina
1006 Lamond Avenue
Durham, North Carolina 27701

The Research Reported Herein Was Supported Through The Cooperative Research Program Of The United States Office of Education, Department of Health, Education and Welfare; The North Carolina State Board of Education; And Carnegie Corporation of New York

UD 006 709

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3. Basic Sports Movements (Physical Education)

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5. Problem Solving (Math)

6. Reading (Language Arts)

# SUMMARY

The North Carolina Advancement School was established in November, 1964, to study the educational phenomenon termed "underachievement" and to select, develop and disseminate methods and materials which the state's public schools might use to combat underachievement.

It was operated as a private, residential school for eighth-grade underachieving boys from the public schools of the state. During its initial period, it accommodated 2323 boys and 252 "visiting teachers" who obtained in-service education on the problems of underachievement.

Administered during its first three years by the Learning Institute of North Carolina, a private, nonprofit educational research agency, the Advancement School employed an empirical intuitive approach to develop learning programs in four subject matter areas. These programs were then shown to be effective not only at the Advancement School but also with underachievers and other students in a representative selection of the public schools of North Carolina.

The nine learning programs eventually tested in the public schools evolved in the course of direct interaction between imaginative teachers and their students, underachieving eighth-grade boys from every geographical area and socioeconomic level in the state. These programs embodied a style of instruction described by the staff as "experiential," and relevance to students' interests and needs was a primary criterion for the selection of subject matter. Their effectiveness was demonstrated in a field testing program (1966-67) involving 6,000 public school students, which also served the purpose of initial dissemination.

A Visiting Teacher Program at the School had been envisioned originally as the principal agent of dissemination, but was prevented by operational difficulties from functioning to capacity.

The Advancement School also carried out several studies on the basis of demographic and psychodynamic data gathered there. These contributed to program building and corroborated many of the intuitive judgments which figured so importantly in the development process.

The entire Advancement School experiment was carried out by the Learning Institute under subcontract from the North Carolina State Board of Education. The project, exclusive of the field testing program, was financed by the United States Office of Education, the State Board of Education and the Carnegie Corporation. The total of the grants was $3.35 million. The field testing effort was separately financed by a direct grant to LINC from the Carnegie Corporation in the amount of $85,000.

# Preface

This report on the 1964-67 North Carolina Advancement School experiment was written at the Advancement School during the interval between June 30, and October 1, 1967.

The special staff which produced the report was composed of former employees of the Advancement School who had had the benefit of long-term association with first-hand knowledge of the School, as follows:

Charles Thompson, Editorial Director

Dr. William Schwarzbek, Research Director

Robert Stern, Staff Writer

Robert Holley, Research Assistant

Gregory Teague, Research Assistant

Dale Farron, Research Assistant

Roberta Blake, Research Assistant

Geraldine Henderson, Clerical Assistant

Roberta Shelton, Secretary

The Learning Institute of North Carolina is indebted to these individuals for a complex and difficult job well done.

# I

# NARRATIVE DESCRIPTION

# OF

# THE NORTH CAROLINA ADVANCEMENT SCHOOL

## A. Introduction

The North Carolina Advancement School (USOE Cooperative Research Project #H-173) was founded in November, 1964 with the following stated objectives:

A. To determine specifically what recently developed materials and techniques will help to alleviate educational disadvantages in the 8th grade, with emphasis on students with above-average potential (as measured by standard ability tests and/or school counselors) who are achieving from one to three grades below national norms.

B. To develop new materials and new techniques to raise further the achievement levels and aspirations of these students.

C. To work with classroom teachers in arranging suitable curriculum materials so that these materials can be easily used in selected local schools.*

The expenditures for the first three years of the Advancement School's life, including capital investments of equipment and extensive renovations to the buildings of the former City Hospital in Winston-Salem, North Carolina, were as follows:

| Source | 64-65 | 65-66 | 66-67 | Totals 64-67 |
|---|---|---|---|---|
| U. S. Office of Education | $258,970 | $478,350 | $509,580 | $1,246,90 |
| State Board of Education | 389,560 | 376,605 | 285,307 | 1,051,47 |
| Carnegie Corporation | 300,000 | 100,000 | 100,000 | 500,00 |
| TOTALS: | $948,530 | $954,955 | $894,887 | $2,798,37 |

*From the "Curriculum Improvement Proposal" submitted to the United States Office of Education on February 28, 1964, by the North Carolina State Board of Education.

Both the Office of Education and the Carnegie Corporation grants were made to the State Board of Education, which in turn sub-contracted the operation of the Advancement School to the Learning Institute of North Carolina (LINC). LINC is a private, nonprofit corporation supported by both public and private agencies in North Carolina and dedicated to the improvement of public education in the state, with a special focus upon the problems of underachievement. The director of LINC at that time was Harold Howe, II. The president was then Governor Terry Sanford.

As originally planned, the Advancement School was to be a remedial, residential school for eighth-grade boys of average or better abilities, who were performing one or more grade-levels below the norm. The students were to come from public schools across the state and were to spend one term at the Advancement School. The Advancement School would have four terms each year, three of 11 weeks duration, and a summer session of 8 weeks. During each of these terms, 350 boys and 50 "visiting teachers" for in-service training from the same public school systems were to attend.

In practice, the Advancement School averaged only slightly over 200 boys each session, and was never able to attract more than 25 "visiting teachers" during any one term. The major reason for this insofar as the students is concerned, was that the School and LINC made the decision to cut down the student body for each of the two summer sessions (1965 and 1966) in order to operate a Desegregation Institute at the School for 100 North Carolina teachers and administrators.

The Visiting Teacher Program was not successful in terms of numbers enrolled simply because of the problems attendant to teachers leaving home for three months. Although LINC was eventually able to pay the cost of a substitute teacher in the home schools, such substitutes were difficult to find. In addition, most teachers had families and personal responsibilities which made it impossible for them to be gone for such a long period.

In spite of these difficulties over 250 public school teachers participated in the Advancement School's in-service training, and the School served over 2300 boys between November, 1964, and June, 1967.

The Advancement School opened on November 8, 1964 with a pilot group of 82 boys. The staff was under the direction of Dr. Gordon L. McAndrew and consisted of trained teachers from both within and without North Carolina, Peace Corps returnees, and work-study college students who served as resident counselors. The "framework" for the School, however, had been in existence since October, 1963, in the form of a paper entitled "A Statement Concerning the North Carolina Advancement School." This statement was produced by Governor Sanford's educational and cultural aide, novelist John Ehle, and represented many months of work on the part of the Governor's staff and the educational officials of the state.

On the basis of that first statement, the State Board of Education had been able to receive almost $80,000 in planning money (Cooperative Research grant F-033) from the Office of

Education to develop the detailed proposal which eventually resulted in the larger grant (#H-173). The coordinator of the Advancement School planning, which took place early in 1964, was Mr. Ralph McCallister.

The Advancement School's first pilot session was frankly remedial. The School was then the only curriculum development center of its kind in the nation,* and its dual aim -- to help its students back into the mainstream of education while simultaneously developing methods and materials to combat underachievement in the public schools -- had never been attempted in quite that way before. Both the staffs of LINC and of the Advancement School felt that the first order of business must necessarily be to try to understand their first 82 students, and to see what kinds of approaches and materials would prove to be the most effective with that disparate group of youngsters. Underachievement, the staff soon learned, is no respecter of status or income; the Advancement School students in that first term, as in every term that followed, came from all socio-economic levels and from all regions of the state.**

With its opening, the Advancement School had immediately become a significant educational venture in several respects;

1. As a strategy for development of curricula and teaching methods for use in the public schools, the Advancement School was unique. The common pattern in curriculum development found subject matter experts constructing courses in an academic setting and only later trying them out with students. At the

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*Since then, at least three such schools have been established, as mentioned at the end of this narrative.

**See Appendix H, "Underachievement, Sample Study" for data concerning the socio-economic background of the Advancement School's students.

Advancement School, courses would be developed by classroom teachers in daily interaction with a representative group of the most difficult population of students in the schools: underachievers.

2. The problem under attack was one of major proportions on the national scene. As the October "Statement Concerning the North Carolina Advancement School" had announced, "This is not a local school in any sense; it will be the first school of its type in our country...." Because its focus would be on development rather than service to the comparative handful it could accommodate in person, its results would be available to interested educators, and thence to children, all over the United States.

3. By this time it had been determined that LINC would administer the Advancement School under sub-contract from the State Board of Education. The governmental and educational agencies were setting up a new institution, one of whose functions would be to criticize constructively and offer alternatives to their own practices.

4. The teacher training component of the School represented a unique program of dissemination for newly developed curricula and methods. Teachers would learn new approaches to instruction right in the classroom through first-hand experience under the guidance of master teachers.

In addition to the three general objectives set out in the Curriculum Improvement Proposal, there were also three general hypotheses:

1. Advanced methodology and materials, such as programmed instruction and new media, are more effective in teaching underachieving students than conventional methods.

2. Regular classroom teachers, in association with master teachers, using the newest techniques and media of instruction, can learn in three or four months to make effective use in specific courses of the programmed instruction and media.

3. Materials developed at a residential school can be adapted to the needs of similar types of students in non-residential local schools.

The Advancement School, then, had become a reality because of one state's concern over a national educational problem. Although North Carolina's +40% drop-out rate was among the highest in the country in 1964, every other state in the Union was plagued by the problem of students who had the ability to succeed in school, but who were not succeeding. The Advancement School hoped to find ways to break this cycle of underachievement and lead students into a more successful school experience.

B. Method

Although many theories of education offered the Advancement School possible approaches to the problem of combating underachievement, there was no theoretical "model" -- no comprehensive, proven theory of underachievement upon which the School could begin to build exportable learning programs. And, in addition, there was some fear on the part of LINC and the director of the School, Dr. McAndrew, that to espouse any single theory would be tantamount to pre-determining the course the School's evolution would take. Thus, the Advancement School became an experiment which set out to evolve a theory while simultaneously evolving programs, and in the process of interaction with underachieving students. This does not mean, of course, that theory played no role in program-building. What it does mean includes the following:

a. The staff eschewed rigid preconceptions.

b. Many different theories, comprehensive and partial, were tried out.

c. Some of these theories were taken directly from extant thought in the areas of education, psychology, and sociology by staff members whose prior and continuing experience with children tended to bear out the theories.

d. Other theories, in varying degrees of originality, were conceived by the staff; again, on the basis of prior and continuing experience with children.

e. Although every educator's experience is shaped by theory to some degree, the staff made a deliberate effort to rely upon their own teaching experience rather than upon theory.

f. All speculation, no matter how enlightened, was constantly checked against classroom realities.

It was in this sense that both policy decisions and program building were approached empirically.

Early in the School's history the attempt was made to begin to build programs through the experimental testing of a series of highly specific, formally-stated hypotheses. This early procedure was soon abandoned, both by default and by design; it was difficult to locate research personnel trained to adapt themselves to the unusual demands of the programs under development, and research findings upon which one might build formal hypotheses were rare.

Therefore, the School early began to rely upon the day-by-day experience of working with underachievers, and upon the "educated intuition" of its staff. Certain implicit assumptions about the nature of underachieving students grew with the staff's growing experience and only gradually, during the very process of program development, were these implicit assumptions made

explicit. During the developmental process, informal classroom feedback was abundant; in this way the implications of an assumption could be checked even though the assumption itself may not have been fully articulated.

Beginning almost immediately with the first pilot session, the School realized that a strictly "remedial" approach was not going to lead to the development of viable programs which would effectively combat underachievement soon proved to be far deeper and more complex than simple remediation could solve. While maintaining an individualized skill-remediation program for each of its students, the School moved to work in the larger area of motivation; as a result, lack of motivation to learn became one of the central "implicit assumptions" about underachievers mentioned above.

To this empirical and intuitive process evolved by the staff of the School was added the assessments of many respected consultants. Because these assessments brought an objectivity the project itself would have found difficult to attain, they were given considerable weight. Then, once a "first draft" version of the learning program in language arts, social scudies, math or science had been developed, that program's objectives were clarified and strenuous efforts were made to obtain objective and rigorous evaluations. (Experimental procedure and objective tests played a larger role in the initial phase of development of some programs than in others, but ultimately all the programs developed by the School were subjected

to such procedures. Also, current test data of changes in students' achievement levels and attitudes were available to the staff and had some impact upon program development. These data gave a general impression of the effectiveness of individual programs in raising achievement levels and of the whole School in improving attitudes, but did not indicate specifically what facets of the overall program were responsible.)

In keeping with the empirical orientation of the School, a staff of varied educational persuasions was selected; what figured most importantly in their selection was their ability to experiment and innovate. Flexibility and tolerance for ambiguity proved to be almost equally important for teaching success at the School, for it evolved a climate of freedom and responsibility quite unlike the more rigid structuring of most schools. Although organizational structure did emerge, it never became rigidly defined and the dual or multiple roles staff members filled in the early days never completely disappeared. In addition to being both teachers and curriculum developers, all staff members had a voice in policy decisions of the School with reference to the students. One effect of this expressed confidence in the staff was a sense of what some of them have termed "equality" which led to their deeper involvement in the School's mission.

Thus, the Advancement School's "method" involved an empirical approach which ultimately focused upon student-motivation, a flexibility of both structure and staff roles, and a climate of both freedom and unusual responsibility.

C. Brief Description of Some Aspects of the Operation

From two to three hundred underachieving eighth grade boys attended the School each of the three regular eleven-week terms, and two hundred or fewer attended each eight-week summer session. Because the School represented a curriculum-development model which, if successful, might be employed in development for all grade levels, the selection of a particular grade level on which to begin work was not crucial. Therefore a number of considerations related to the School's secondary purpose, to offer students a short-term remedial experience in a residential setting, were allowed to dictate the choice of a target population:

1. The eighth grade is considered an "exploratory" year in North Carolina schools and absence from the home school would create fewer difficulties than in other grades;

2. Parents would be more reluctant to permit younger children to attend and younger children would be more prone to homesickness;

3. The eighth grade seemed to be the latest grade level at which the School could intervene with much hope of success;

4. Many unnecessary difficulties attend a co-educational school for this age level; statistics indicated that boys were more inclined to drop out of public school than girls.

Students were nominated by their home schools and selected by the Advancement School on the basis of these criteria and considerations:

1. Average of better ability. Generally, the measure was one of various group intelligence tests, but because of the generally-recognized cultural bias of these tests, and for other

reasons as well (such as uneven procedures for administering tests and infrequency of testing in some of the sending schools), the judgment of teachers, counselors and principals was also given considerable, sometimes major, weight.

2. Achievement significantly below potential.

One of the original criteria, that the boys had to be achieving one or more grades below placement (as measured by standardized tests), was quickly found undependable. North Carolina, along with the other 49 states, varies from the national norm in many respects educationally, and the national "average" with reference to student performance was soon found to have little meaning on a state-wide level. Then, too, many local North Carolina schools vary significantly from the state "norm." Further, a boy leading his class on achievement tests might still be making poor grades. Consequently, beginning in the spring of 1965, the School asked the nominees' schools to report the boys' grades and their class standings according to grades. Some extraordinarily intelligent students who were up to grade level but still well below potential were accepted. The median I.Q. of nominees was 108, median achievement level sixth grade, and median letter grade (on an A-F scale) D.

3. Though the degree of underachievement as defined in this way was the salient criterion, a racial balance approximating that in the state (25% to 30% Negro) was maintained. Geographical and urban-rural distribution were also factors. The students came from every socioeconomic class. Preference was given to students from school systems nominating "visiting teachers" and eventually to systems which had sent fewer students.
4. It was stressed that the School was not set up to accommodate the emotionally disturbed or the mentally retarded, and although a few of each filtered through the selection system, there were no more than would be found in the general school population. Individual psychological test data were available from the home schools for about five per cent of the students.
5. Every effort was made to select underachievers of all types. A random study of 188 boys drawn from all but the final term shows that thirty per cent came from families with incomes exceeding $8,000; thirty-six per cent, $4,000-$8,000; and thirty-four per cent, less than $4,000. In all, 2,323 boys from 133 of the state's 169 school systems attended the Advancement School.

Upon entering and leaving the Advancement School, students were given comprehensive tests and questionnaires under controlled conditions, via the closed-circuit television system (including achievement, I.Q., personality, and study methods and attitudes tests and detailed demographic questionnaires). When the achievement survey suggested a need, in-depth diagnosis of reading proficiencies and deficiencies was made.

A system evolved whereby the student body was divided into approximately ten "house" groups of about twenty students, each with an experienced house advisor or counselor and a less experienced resident tutor. After the first year or so, all counselors were college graduates, with varied majors. Many had teaching or coaching experience -- quite a few in the Peace Corps. The two men who served as Head Counselors had special training in the counseling area; many of the remainder were qualified by their instinctive understanding of children. They did little counseling along vocational lines. Rather, they lived with the students and with greater or lesser directiveness* conducted a program of sports, recreational and cultural activities; supervised and aided in study; and used a group counseling approach to work out problems of discipline and social and psychological adjustment. In all this they were assisted by their resident tutors, most of whom were college work-study students.

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*See Appendix N, "A Study of Counseling Style."

Initially, composition of houses was random. As time went on, various methods of composition were tried, including a system of salient characteristics such as high reading -- high intelligence, low reading -- high intelligence, poor social adjustment and so on.

For approximately the last year and a half, students attended classes as house groups. This facilitated closer teacher-counselor cooperation.

Regular academic classes ran from about 8:00 A.M. until approximately 1:00 P.M. Classes included two in English (Communication and either Experiential Grammar and Language or Remedial Reading), and one each in Math, Social Studies, Science and Physical Education.

Various sorts of independent study programs took up the early afternoon, tending more and more toward the voluntary as time went on.

D. Dissemination: the Approach and Operation

> "My whole approach to teaching has changed. I don't know what I'll do when I get back, but I'm looking at the whole thing in a very different way now."

So spoke one of the Advancement School's 252 "VTs" or "visiting teachers."

The School's Visiting Teaching Program was a direct outcome of the Curriculum Improvement Proposal's third objective:

> "to work with classroom teachers in arranging suitable materials, so that these materials can be easily used in selected local schools."

Early in the planning stages, it was decided that the best place to work with classroom teachers was the Advancement School itself, and the Visiting Teacher Program became an integral part of the School. Its primary focus was in-service education, whereby the VTs learned new methods of teaching working under -- and alongside -- experts from all over the nation, and practicing in the School's unique classroom situations. It was an "each-one-teach-one" scheme, with the VTs disseminating what they learned to their colleagues at their home schools. In this way, it was hoped that a significant number of the state's junior high school teachers eventually would be reached -- and through them, of course, the children. Although the School was never able to attract as many teachers as was originally planned, the majority of the teachers who did attend became genuinely involved in the School's program and made a real contribution to it.

The formal aspect of the in-service program included frequent -- sometimes twice a week -- lectures by consultants and the School's professional staff on such subjects as educational philosophy, innovative methodology and problems of underachievers. Workshops, too, played an important part; possibly the most significant one was on graphics. Here, VTs learned how to make maximum use of copying machines, common in most schools, in producing transparencies for overhead projectors. The following comments collected from surveys were typical of the "visiting teachers'" response to the workshops:

> I have found the making of transparencies to be most helpful to me. I plan to use them as a teaching aid.
>
> [The most helpful thing about the workshop was] the easy atmosphere of individual exploration. That is, each person was encouraged to do some things on his own.

This last testimonial holds the key to the Visiting Teacher Program: "...encouraged to do some things on his own." Most of the teachers did use the equipment at the School to create their own productions, and in many instances used them in the classes they taught. In this way they were often able to determine from student responses whether their productions were effective. And so with encouragement from the professional staff -- and often from the students -- the "visiting teachers" had ample opportunity to create and refine in and out of class.

"Visiting teachers" who came to the School believing they would simply sit passively at the master teacher's elbow quickly discovered their error. One VT compared her first days at the School to "a father's throwing his boy into a pool and saying 'Swim!'. You learn that way, you have to. You don't want to lose face. They want you to become involved, and it's much easier to become involved if it's your ball game than it would be if you had to use other people's ideas...."

Each teacher taught at least two classes a day in the department -- language arts, reading, math, social studies, science or physical education -- to which he had been assigned. They sat in on other classes, observing permanent teachers and worked under the same roof with the staff and students and thus

became involved in special activities, in counseling, and in the greater world of education outside the classroom.

Nothing was artificial about the "visiting teachers'" assimilation into school life. They were a part of the School. If many of the classes were to be taught at all, they had to teach them. If the boys were to derive full benefit from the School, they had to work and play with them. If whatever the staff produced was to be molded properly, by trial and error, the "visiting teachers" had to become involved with the staff.

For its final term under the direction of LINC, the School arranged for student teachers to complete their practice teaching requirements there. Nine seniors, from Duke University, Lenoir-Rhyne College, North Carolina A & T College and the Charlotte and Greensboro campuses of the University of North Carolina took part in this program. They lived in and became part of the School in every respect. Some began immediately to teach their own classes; others took over classes after several days. Each student teacher had a supervising teacher from the permanent staff in the same departmental area. Some student teachers met with their supervisors daily for perhaps an hour; others less frequently.

Most student teachers agreed that the staff was wise in committing them to action from the very first. At the same time, their lack of teaching experience made them solicitous of criticism as well as encouragement.

The biracial aspects of the School were virtually unnoticed by the younger student teachers. But to many of the

older "visiting teachers," living and teaching in an integrated environment was a departure from their situations at home. Some were plainly discomfited, but most became acclimated quickly. "It works," said one VT. "They just come together and wham! they're a house; they're a group. The racial differences don't seem to make any difference to them. I was amazed, I was very leery. I'm a Southerner in that respect."

Such successful integration, together with the recognized relationship between underachievement and the problems of school desegregation, led to the decision to hold a Summer Institute on Desegregation in 1965 and again in 1966. Early in January of that year, the LINC staff prepared a proposal in cooperation with the University of North Carolina at Chapel Hill for an institute to be operated in cooperation with and at the Advancement School.

The project placed special emphasis on the problems that deprived children bring to newly desegregated schools and had as its objectives:

1. to provide teachers, counselors and administrators with knowledge and understanding of how a student's background affects his motivation for learning and achievement, as well as with knowledge of the effects of prejudice;
2. to improve teachers' skills in particular academic subjects in order to enable them to deal more effectively with problems of motivation and achievement; and

3. to provide teachers, counselors and administrators with experience in living, working and learning in an integrated environment.

The University furnished the formal training; the Advancement School the first-hand experience.

Certain important modifications were made in the 1966 Institute on the basis of the first summer's experience:

1. Observation gave way to greater participation. A group of Institute participants was assigned to each house, and they virtually lived with the students. They attended classes, tutored, counseled, talked, joked, camped out, played softball and went on field trips with them. The residential setting afforded them many opportunities to be with the boys in their "natural habitat."

2. Evaluation of the first summer's project showed that greater attitudinal change was effected by face-to-face confrontation on racial issues than by the acquisition of intellectual knowledge. Thus, provision was made for frequent and continuing discussion in a small-group context.

The two Desegregation Institutes served to acquaint more public school personnel with the Advancement School program, but it did not solve the larger -- and serious -- problem of how to reach large numbers of public school teachers. The approach to this problem of dissemination eventually adopted by the School came about indirectly.

Even in the beginning, the planners of the Advancement School had recognized that programs which worked well in the very special residential setting of the School would have to be tested in the public schools to establish their real value, before being recommended for widespread use. Some kind of field-testing, for evaluation purposes, would necessarily need to be carried out.

In the summer and fall of 1966, however, a new view of this eventual field-testing process was conceived. This new view grew out of discussions among the administration and staff of the School concerning one of the learning programs -- "Communications" -- the language arts department had produced. The director of the School, Gordon McAndrew, was of the opinion that the Communications course's success (which was considerable) was inextricably tied to the personality of its chief designer, who taught it in the classroom. This staff member, however, felt that although his own personality had figured importantly in developing the course, it would be quite possible to give any competent teacher the materials and lesson plans and some help in using them, and see his own results successfully duplicated in that other teacher's classroom.

This, of course, was the basis of the original Visiting Teacher Program, but there was the additional implication that the materials and lesson plans -- because of their design -- had a teacher-training component implicit in them, and that this component could change teacher behavior even without the direct contact with the School the VT's enjoyed. From this point, it was only a few steps to the idea of a field-testing program which would double as a dissemination tool. Once these mental steps were made, all of the Advancement School-produced programs deliberately included teacher-training elements.

As the final report on the Carnegie Corporation-financed field-testing program of 1966-67 stated:*

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*See Appendix A, "Final Report on a Dissemination Task Force Project."

> "Research has indicated that most people don't change values or patterns of behavior simply by knowing about alternatives. Situations must be created whereby one examines his behavior, compares it with alternatives and then commits himself to a better alternative. Of importance in the field testing program was the belief that teachers, as well as students, learn best experientially."

Field testing teachers, then, would learn to use new materials and methods by using them, with assistance and advice from a task force of experienced Advancement School teachers. Essentially, the idea was to take the Visiting Teacher Program out into the schools.

In addition to the "visiting teacher" and field testing programs, dissemination was also accomplished through consultation, visitation, publications, and school-sponsored conferences.

1. Consultation. Many local schools and systems were aided by Advancement School personnel in planning new projects and revisions of their programs. To cite an example, in September, 1966 the Charlotte-Mecklenburg Schools proposed a "Learning Academy"; "a residential center for the treatment of students with psychoeducational problems." The total first-year cost was budgeted at $850,000, half of which was received from federal government under Title III, P.L. 89-10.

From page 21 of this proposal to the Office of Education:

> A special word needs to be said about the North Carolina Advancement School. It, probably more than any other single agency, has influenced the planning of the Learning Academy. There have been numerous exchange visits with the North Carolina Advancement School staff and the Charlotte-Mecklenburg Central Office staff.

> A number of teachers and hundreds of students from Charlotte have participated in the eleven-week programs sponsored by the North Carolina Advancement School. Their experience with the residential setting, work with underachieving students, wisdom and the initiative of the entire North Carolina Advancement School staff has been basic to the planning for the Learning Academy.

The School was also instrumental in securing an Upward Bound grant for Winston-Salem State College in the summer of 1966.

2. Visitation. Thousands of educators from all over the country came to the School to observe and to talk with the staff.

3. Publication. Several staff members published articles in educational journals, and the School received great attention in the national press. Saturday Review called it "the most exciting school in America." Several monographs were reproduced and circulated to interested educators. The School was also given great attention in The LINC Quarterly.

# II

# FINDINGS AND ANALYSIS

The results of a comprehensive attack on a problem of underachievement's proportions necessarily take many forms.

The effectiveness of the Advancement School's general approach to the problem--empirical and intuitive in a supportive atmosphere--has such deep, far-reaching implications for projects involving underachieving students, and even for the everyday operation of schools, that this in itself may constitute the single most important result of the project.

More concrete results exist in the actual programs created and disseminated by the School. A third kind of "result" is the evolved philosophy of curriculum and methodology which the programs embody, and another result of value is the use of the field testing project as a strategy for dissemination.

The Learning Institute believes that the demographic (age, race, socioeconomic status, etc.) and psychodynamic (intelligence, attitudes, values, etc.) inquiries into the causes of underachievement were important mainly as they figured in program development. The focus of the School under LINC's direction was on applied research which would point to possible cures for underachievement in the form of exportable methods and materials.

## A. General Description of the Philosophy Behind the Programs

An acute sensitivity to working with the students became an indispensable element of the School's approach. Many of the faculty voiced beliefs that poorly-motivated students seemed to come alive when they were truly convinced that the teachers and counselors were actually listening to them and cared about what they said. One of the instructional staff said that a major virtue of the curriculum she was working on was that:

> It forces teachers to see their students as functioning, feeling people rather than as stereotyped students. It forces teachers and students to stop playing roles and to be themselves.*

This belief in the importance of staff sensitivity to the students was underscored in one faculty member's comments about ineffective teachers:

> They don't know how or when to pick up a response and explore it. Consequently they show one film after another, or play records, or present one kind of material after the other without getting much from it. They rely on something outside themselves to carry their classes and really are limiting themselves and their students rather than freely exploring whatever is in the material that the students need, individually. It's easy for the teachers, but not effective.

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*This quote and those that follow came from tapes made by the Advancement School staff in connection with the preparation of Appendix B, "Subjective Examination of the Advancement School's Work with Underachievers."

A general sensitivity to the students leads to a second aspect of the philosophy which was found to have value in dealing with underachievers: students seemed to profit most when they develop a sense of contributing, belonging and succeeding.

The Advancement School philosophy is emphatic about the necessity for providing this sense of accomplishment for students. One teacher gave this rationale:

> I think you have to be positive in the beginning. These kids are insecure; many of them are used to taking back places in the classroom; they're afraid of talking. You've got to encourage them to come out.
>
> We've also realized the importance of success for students. Even in math, for example, the kid who always brings up the rear gives a wrong answer, but he still can feel some sense of success. This is very important for his self-image; we need this guarantee of success.

Another teacher stressed the importance of allowing for individual differences between students:

> I think that people don't grow in an even manner all the way across the board and society to some extent assumes they do.

This teacher along with many others was strongly interested in creating academic situations in which students were not forced to compete with one another. Making use of laboratories, these teachers encouraged each student to choose his own field of inquiry in which he could work at his own rate and in his own fashion without comparison against others.

The same belief in giving the students support and a feeling of success was widely held by the counseling staff at the School. Many counselors worked hard to find some area in which each student could make a contribution. One counselor added:

> A lot of counseling takes place with an arm on the shoulder, letting them know you have some faith in them. I really think the main thing we give them is understanding and the freedom to think.

Staff members agreed that freedom was a highly significant issue. While there was some disagreement about how much freedom and what sort of freedom was valuable for students, the belief of one math teacher was representative:

> One thing that's obvious is the great deal of freedom students have, compared to their home schools or even their home lives. These freedoms enable the youngster to emerge as an individual more than he has outside the School. Because this type of behavior exists, we can work more effectively with them.

The idea of this freedom was not so much to force learning on the students as to help them reach for it and desire it. The chairman of the English department during the School's last year put it this way:

> I try to establish an atmosphere of warmth and freedom so a child can examine and deal with his problems. Through freedom, the child learns to know and express what he really is. When the child learns what he wants to know, learning becomes meaningful; he has learned to learn. I think self-initiated learning is the most invigorating, enduring and maturing process a person can go through in his attempt to become an independent being. Genuine independence is, I think, the purpose of education.

Other staff members believed in the desirability of some freedom, but were wary of overdoing it. In the taped discussions made in June, 1967, some questioned whether eighth-grade underachievers had the maturity and the judgment to make use of a great degree of freedom:

> Unless there was quite a bit of self-discipline on the part of the students, it would end up just being a play period.

Another teacher replied quickly, "But you know, kids learn an awful lot from playing."

The exchange was significant in view of the School's use in academic areas of games or simulations which capitalize on the student's natural motivation for play to lead him toward genuine learning.

The rationale behind giving students freedom was stated by a social studies teacher:

> Perhaps freedom is a misleading term. We've almost liberated students so they have the freedom and responsibility to control their own lives. We rely on the student group to shape the directions that we take.

While freedom was used by the staff to implement learning, there was concern with exploring various ways of handling it. A science teacher made this suggestion:

> Students learn best from a combination of freedom and restriction. They should feel very free within the classroom but at the same time within the gounds prescribed by the group--how the group feels and how the teacher feels.

A counselor expressed a similar interest in providing some limits or structure for the boy's freedom:

> I do not feel a boy should be allowed to do exactly as he pleases. You have to be perceptive to what he needs at the time. Also you have to know the kid. You have a structure, but then you have to be flexible enough so that it bends a little bit. If kids have some sort of a structure, they are able to plan better.

While the best type of structure or restriction was occasionally disputed, one counselor's statement served to represent the concensus:

> Traditional "discipline" is sort of the antithesis of everything that should be going on in counseling.

This statement is supported by a reading instructor's comment about changes in his own views of discipline:

> I know personally that I have made a drastic change with how I work with students....from the standpoint of the student my attitude or philosophy was: Get your lesson and behave yourself, sit tall in your seat, don't let me hear any sounds, period. I note a vast difference in my attitude now toward students.

The staff's belief in giving students freedom and in encouraging them to be independent was related to a generally-held theory that--with the Advancement School's special type of student--learning seemed to come most easily and frequently when the boys were involved in some kind of engrossing activity, activities sometimes not found in average classrooms. A member of the math department described the Advancement School's approach this way:

> Everything here is centered on the student doing things....on the student's active role.

Or, as a counselor saw it:

> There's a phenomenal aura of activity that goes on here. It's in the hallways--you can feel it. The students get involved in all kinds of situations that are new and very exciting. Everybody they see is busy. They don't see many people just sitting and doing nothing...or teachers just coming to class to teach.

Several members of the faculty used the term "experiential learning" to describe this approach to learning.

A science teacher gave this difinition of the term:

> . . .You want more or less to present a situation or to produce an environment more conducive to the learning situation. Getting them physically involved with something, or mentally involved with something, or emotionally involved.

A math teacher discussed his department's approach:

> We want them to generate a particular type of thought; but there are many, many different situations in which they can generate this thought, and we present them with these and let them generate thought in any one that suits the individual student.

A physical education instructor commented on the instructional department:

> I think most teachers around here have been going on the fact that more things are "caught" than "taught." Experiences that students have had in class. . . .I know on these follow-up reports, this is what the guys (Advancement School graduates) are talking about--the <u>experiences</u> they had.

Based on their theories about experiential learning, many staff members wanted to decrease the amount of time students spent in a traditional classroom environment and increase the time spent in laboratories, experiments, projects, and non-class activities. Several people worked on what the school called learning

laboratories, areas students considered free of any academic requirements, and stocked with materials designed to interest students and to make them want to explain, to experiment, and to understand. Both the boys' free choice and their active involvement were considered virtues of the learning labs.

The concept of learning through experiences was used in both the counseling and the academic areas. Counselors believed that experience gained through interaction with other boys could provide valuable social learning. One counselor put it this way:

> To me, not the counselors or the teachers, but the kids themselves play the most important part in changing a kid.

The same counselor recounted this incident:

> We had a boy and he had just never done anything in his life. He was actually the hoodlum of our house . . . the kids changed him. I don't think the counselors change boys that much. I think that kids change them because . . . they always want to be up with their peers.

In the academic departments, experiential learning involved somewhat less emphasis on experiences based on student interaction with other students, and greater emphasis on student interaction with ideas, theories, and materials drawn from the traditional academic subject areas. By the third year of the experiment, the teachers concurred on three fundamental guidelines for conducting classes: first, that the experiences interest the students

and appeal to them as relevant, worthwhile activities; second, that the experiences not be restricted necessarily by academic disciplines; and third, that they not be related to a system of extrinsic reward.*

The staff had worked continually to find materials and encourage experiences that had a high interest value for the boys. In one teacher's words, "the kid's motivation or interest is essential in order for him to learn."

The staff was convinced that one important consideration in stimulating, or as many said, "turning on," underachievers, who may well be "turned off" to school, was to create situations in which physical or emotional involvement was called for. A teacher commented:

> It seems that one thing we're leaning toward is not a rejection of the intellectual, but more emphasis on the emotional aspect of the child.

Or, from an English teacher's point of view:

> A strictly auditory approach and visual approach, "Get out your books!" won't work for these people (underachievers). Everything here starts from some physical experience or emotional involvement. The key is emotional . . . a crack football team probably stems from some emotional involvement and commitment.

A science teacher discussed how his department had become increasingly committed to experiential learning:

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*See Appendix I,"The Merit Point System," for description of the School's investigation of extrinsic rewards.

> Physical involvement isn't that new for anybody. We (in science) started on a more limited basis than we are practicing now. There was too much talking and not enough listening or doing in the beginning.

Calling for a high degree of student involvement went hand in hand with attempts to meet the students' interests and concerns.

And another staff member reported, after talking with graduates of the school:

> I just came from a follow-up study at Charlotte. I had 25 boys there and it was the total picture of the Advancement School; they had more respect for the teachers. They felt on a level with their teachers.

Reaching the students on their own ground was only part of the staff's approach to students. The other part consisted of approaching them from a frankly adult standpoint. A social studies teacher discussed his feelings about this:

> It means entirely different kinds of materials. You know, Claude Brown in Harlem and the Children of Sanches in Mexico had no adolescence. They were dealing with these problems, too. We hold them in a moratorium called adolescence. They're ready for more than that, they're capable of coping with more mature situations. They are ready to actually participate in the adult, community world. This would be a very different curriculum--one that is more relevant because it is close to their concerns.

The staff believed that the arbitrary disciplinary boundaries, which divide academic areas from each other, had a restricting and debilitating effect on the learning process in underachievers. A given experience might lead students in a variety of directions. One might pursue a

mathematical interest, while another might wish to probe its sociological or philosophical implications. Still a third might follow a desire to create a literary expression of his experience. In each case, the child had been stimulated, but to confine him within disciplinary boundaries at that point would be to stifle his own motivation to pursue and to learn.

# III

# STUDIES

Note: Research reported in some of the following studies had not reached the stage of rigorous quantification, but it was thought important to report it, nonetheless.

1. "Final Report of a Dissemination Task Force"

The importance of this field testing report has already been emphasized, and the project described in general terms. Teachers and students responded very positively to the tested programs. Research studies corroborate the teachers' and students' high estimation of the programs' worth. (See Appendix A)

2. "Subjective Examination of the North Carolina Advancement School's Work with Underachievers, 1964-1967"

Numerous quotations from this study appear in the text of this report. It is rich in implied suggestions for more rigorous research, some of which is reported below and some of which may be carried out by the Advancement School as continued under the State Board of Education. (See Appendix B.)

3. "The Independent Study Program of the North Carolina Advancement School"

The introduction to this study notes that

"The basic factor that appears to have influenced and prompted the inception and growth of the independent study idea was the rather obvious view that underachievement can best be treated by means of individualized,

tailor-made programs adapted to the current learning and achievement level of each individual. It had already been noted that teachers in the Advancement School tended to adapt classroom instruction to the various learning levels among their students to a much greater extent than was true of teachers in the typical eighth grade in the public schools. However, even this increased instructional flexibility was not fully meeting all individual needs. It appeared desirable to seek means of further individualizing the program outside of the regular classroom instruction."

The learning laboratory, a central component of the independent study program, evolved an approach employing assessment and counseling to devise instructional plans which the students themselves implemented by use of technology and programmed instruction. The lab produced good results with minimal staff input. Such an approach promises to free staff for instructional activities designed to foster the kinds of intellectual and effective development aimed at in the regular academic program. As such, it is extremely significant. (See Appendix C.)

4. "Experiments in Automated Instruction"

This study offers a partial answer to the question, "To what extent can instruction in the classroom be made more efficient and/or more effective by means of instructional tools, particularly the type of instructional

systems which automatically present lesson material and which record and identify the responses of each student?"

Among its interesting findings is "...that programs can be prepared and paced so that a large majority of students can adapt satisfactorily." This judgment implies promise for large-group instruction through technology. (See Appendix D.)

5. "Effects of a Residential School on Underachievers"

(Two Parts)

The first of these two studies carried out in the Fall '65 quarter shows that Advancement School boys gained more than a control group in non-verbal ability, certain aspects of language achievement (punctuation and sentence sense), and study methods (attitude toward school, planning and system, and mechanics of study.) No difference was detected in verbal ability, paragraph meaning, language usuage, and dictionary skills.

In light of the emphasis of the school's program -- particularly the emphasis on changing attitudes -- these findings seem natural. Gains were made in those academic areas in which the school emphasized skills.

The second of the two studies shows that, after a time back in their home schools, students tend to lose the gains they made at the Advancement School. (See Appendix E.)

6. "Race, Ability, Achievement, and Personality"

This study revealed no outstanding differences between Advancement School students of the two races, but

a. Caucasian students scored higher in ability and achievement.

b. Negro students seemed to have a more favorable attitude toward school and study.

c. Consistent differences in gains made by the two racial groups were very few and highly specific.

d. Overall, results on differences in personal and social adjustment tend to wash out. (See Appendix F.)

7. "Internal Evaluation of The Reading Clinic"

(Two Parts)

Although those familiar with the clinic's program note from this study that clinic students outgained non-clinic students in those particular areas in which they received special instruction in the clinic, the two studies together indicate that the clinic was not very effective. Subsequently the clinic began to place greater emphasis on motivation. (See Appendix G.)

8. "Underachievement, Sample Study"

This sample study indicates that

a. The percentage of broken homes among Advancement School boys was only slightly higher than in the general population. After the Advancement School experience, boys from broken homes did about

as well as boys from two-parent homes.

b. About 68% of the Advancement School's students made and sustained progress.

c. About 28% of the Advancement School's students came from families with incomes of over $8,000; 33% from $4,000-$8,000; and 39% under $4,000.

d. No particular position in a series of children and no particular family size is characteristic of the boys. These factors seemed to have little effect on the students' progress.

e. About 50% of the white boys made and sustained progress, and about 71% of the Negroes.

f. Overall, there was no significant difference in progress between high I.Q. boys and normal I.Q. boys. (See Appendix H.)

9. <u>"The Merit Point System"</u>

The "Conclusions" section of this study notes that "Whatever interpretation given (the data), one thing is certain -- the less bright, less well-adjusted student at the Advancement School was penalized by the merit point system. He did not succeed in it. Perhaps it was too closely akin to the system he had already failed in for a number of years. There are no comparative data on how well students performed once the merit system was abolished. That comparison should be made some day. It

is hoped, of course, that freeing students from the arbitrary judgment of a competitive award system will enable them to begin functioning well." (See Appendix I.)

10. "The Onset of Underachievement"

This report contains some reflection and recommendations on the proper means of determining just when underachievement sets in, in addition to an actual study according to grades, the results of which are as follows for a sample of underachievers:

1. The percentage of students with below-average grades increases each year.

2. The rate of increase in the percentage of students with below-average grades appears to show a slight positive acceleration.

3. The overall rate of increase in below-average grades definitely grows greater as the mental ability level declines. (See Appendix J.)

11. "The Communications Unit"

(Two Parts)

The "Results and Discussion" section of the first of these two studies states:

"According to the results of this study, under-achieving boys at the North Carolina Advancement School, taking the Communication Unit, increased in their written fluency and improved in their creative ability to associate words or concepts to form new relationships."

The second study seems to indicate that the boys became more humane - more sensitive to others and better able to communicate that sensitivity - after working with the unit. This is one sort of affective growth which the school emphasized more and more as it evolved. (See Appendix K.)

12. "Academic Games and Educational Simulations" (Two Parts)

The Advancement School's Simulations Department was associated with Social Studies, the academic department in which greatest use of simulations was made and contemplated, but Simulations' charge was a broader one: to determine in general the ways games could be used to meet the needs of underachievers and to devise specific procedures for the use of games in public schools. Most games experimented with at the Advancement School represented an attempt to give students a feeling - not just an intellectual concept - of what it is like to participate in America's economic, social, or political systems. One of their principal objectives was to develop in students a sense of control over their own destinies, a sense which underachievers seem to lack. This is another type of affective development the Advancement School sought to bring about. (See Appendix L.)

13. "Superintendents' Reactions Concerning the Past Operation of the North Carolina Advancement School and Suggestions for Its Future Direction"

This two-phase study covers three principal topics associated with the School: the Visiting Teacher Program, communication with the local schools, and the local schools' willingness to accommodate the special needs of returning students.

As part of the inquiry into communication with the local schools, the superintendents were asked for reactions to the Advancement School's development and dissemination effort. Ten said they were not familiar with the School's programs and could make no comment; eight believed that the effort was important but cautioned that careful evaluation of the programs should be made before final dissemination; and twelve gave unqualified positive responses.

Most superintendents advocated continuation and expansion of the Visiting Teacher Program. They agreed that the difficulty of finding suitable replacements in the home schools was a serious problem and made several suggestions for solving it.

Several superintendents were critical of the quality of the School's effort at communication with the local schools. Again, they suggested remedies.

Most seemed quite willing to work with the School in devising ways to meet the needs of Advancement School

alumni and other underachievers. (See Appendix M.)

14. "A Study of Counseling Style"

This study, though by no means conclusive, indicates that a "permissive" counseling style may well be more effective with underachievers than a "directive" style. It was conducted by an Advancement School counselor, and it prompted him to re-examine his own "directive" approach. It exemplifies the way in which fairly subjective self-evaluative studies led to changes in the program; such studies are certainly not rigorous final evaluations - nor are they intended to be - but they can lead to reconsideration and possibly to improvement. They are not conclusive, but are heuristic. As such, many educators committed to deliberate but swift changes in the schools through pragmatic experimentation may find them useful. (See Appendix N.)

15. "An Encephalographic Study"

This study is a translation into non-specialist's terms of a lateral research study on the implications of an unusual "brain wave" pattern for underachievement. It was found that underachievers could not be identified on the basis of the "14/6 positive spiking" phenomenon. (See Appendix O.)

# IV

## RELATED DOCUMENTS INCLUDED AS APPENDICES

In addition to the Studies listed in the preceding section, the LINC and Advancement School staffs produced four other documents or sets of documents which directly relate to the overall Advancement School operation, and which therefore deserve inclusion in this Final Report. These are as follows:

a. "A First Year Report on The North Carolina Advancement School"

This is a progress report on the Advancement School's first year of operation and was prepared for Governor Dan K. Moore and the Advisory Budget Commission in December, 1965. It includes certain facts and numerical data about the School as of that date, and is of interest to educators who are looking for a chronological view of the three-year experiment. (See Appendix P.)

b. "A Second Year Report on The North Carolina Advancement School"

As above, this is a simple progress report on the Advancement School's development and was presented to the LINC Board of Directors in December, 1966. This report shows even better results with the students who attended the School during its second year of operation, and significantly more service to the state as a whole. Also included in the report is a section on the LINC recommendations for the future of the School after the initial funding period ended on June 30, 1967. (See Appendix Q.)

c. "A Request for the Continuation of The North Carolina Advancement School"

This document was prepared in February of 1967 by the combined staffs of LINC and the Advancement School, and was directed toward the State Board of Education. It was presented to the Board at its March 3, 1967 meeting. The document highlights the contributions to North Carolina education made by the School and recommends that the State Board of Education request funds from the General Assembly of 1967 for the School's continuation. It also includes recommendations for the School's future direction. (See Appendix R.)

d. "The Advancement School-Produced Learning Programs."

Unfortunately, these "packaged" programs cannot be made available to agencies other than the project's funders because of the prohibitive cost. However, limited numbers of copies of the various syllabi are available upon request from the Learning Institute. In their entirety, the learning programs include the syllabi (or teachers' manuals), lesson plans, tapes, slides, literary material and other appropriate teaching aids.

All of the North Carolina Advancement School programs embody the educational philosophy developed at the School. In general, the students using them are moved from areas of immediate interest and experience to generalizations or abstractions which they must formulate for themselves. Each unit has implicit in it a method of looking at teaching, a

way of viewing education. The units do not consist solely of subject matter; rather, they are introduced, organized and written so as to demand and elicit the same teaching techniques which proved effective at the Advancement School.

The packaged units to be submitted with this report are as follows:

Communications: This course consists of twenty groups of related lessons which utilize both the popular and the fine arts -- including short stories, poetry, films, modern dance and ballet, painting and music -- to explore topics which interest students. Although this course is generally used in connection with the language arts, its principal objective is to help the student to become an independent inquirer, and it can therefore correctly be described as an interdisciplinary unit.

Experiential Grammar: This unit is firmly rooted in the language arts and is designed to teach the student the structure and organization of his native language through personal experience. Again, the student is led to understand the construction of the English language through a process which goes from direct and personal experience to the formulation of abstract ideas and to an understanding of the "rules" of good grammar.

Geology: This Earth Science unit is also based upon the belief that students learn best from activities which involve him physically and which are as visual as possible. It consists of fifty interrelated lessons structured to help

the student derive a sense of science as an ongoing process, and it treats five main subject areas: the identification of rocks and minerals, including a study of their composition; forces that sculpture the earth's surface; forces that modify the earth's features; earth history; and, topographical mapping.

Problem Solving: This is a pre-algebra mathematics review course designed to help students develop power, versatility and precision of thought in math. Such pre-algebra topics as inverse operations, percentages and fractions, including reciprocals, are treated in a way designed to build student confidence by providing them with successful experiences in solving various kinds of math problems. The unit comprises eighteen lessons.

Remedial Reading: This unit includes a remedial and corrective reading handbook, fifteen sample lesson plans, and various tapes and transparancies for use in describing approaches to teaching Word Attack and Comprehension. This unit is designed to help the classroom teacher, who may have no specialized training in reading, evolve a successful diagnostic system of teaching reading which will provide individualized instruction to each of her students.

Physical Education: This unit should be regarded as a curriculum model rather than as a final product to be duplicated. Its first goal is to stimulate students' interest in physical education and improve their basic skills; its second is to increase students' ability to

communicate their ideas about sports, both orally and in written form. The unit is comprised of two interrelated areas: basic sports positions and fundamental movements. It attempts to bring the student into direct contact with himself and to stimulate him to ask questions about what he has seen and felt.

# V

# LATERAL STUDIES

The studies mentioned in Section III were carried out or interpreted by Advancement School personnel as part of the School's overall research program. Beyond these, the School also served as a basis and/or laboratory for several non-School-related explorations made by professionals and graduate students who were not members of the staff. Among these are the studies listed below, along with the names of the investigators and, where possible, the institution or address where copies of the research reports may be requested:

1. "A Report on 14/6 Spiking," a Senior Student Dissertation by John A. Caudel, Bowman-Gray School of Medicine, Winston-Salem, North Carolina
2. "The Comparative Effectiveness of Two Experimental Counselor Training Procedures," a research study by James C. Hurst
3. "The Emotional Status of Poor Readers and Underachievers as Measured by the Welch Figure Test," a research study by Lucia P. Karnes, Counseling and Guidance, UNC-Chapel Hill
4. "A Study of the Voluntary Reading Levels of a Group of Eighth-Grade Boys at the North Carolina Advancement School," a thesis by Judy J. Garitano, School of Library Science, UNC-Chapel Hill

5. "A Study of Changes in Personal Values in Junior High School Teachers and Counselors in an Eight-Week Institute Dealing with Problems of Desegregation," a Ph. D. dissertation by Donald D. Moore, School of Education, UNC-Chapel Hill

# VI

# CONCLUSION

In its first three years, then, the North Carolina Advancement School employed an empirical, intuitive approach to develop curricula and methods which were shown to be effective with underachievers and other students in a representative selection of the state's public schools. The programs evolved in the course of direct interaction between imaginative teachers and their students, underachieving eighth-grade boys from every geographical area and socioeconomic class in the state. Their effectiveness was demonstrated in a field testing program which also served the purpose of tentative dissemination. They consisted not only of materials but also of methods; they embodied a philosophy of teaching described by the staff as "experiential."

The development of this philosophy in itself constitutes an important contribution of the School. It points the way for further applied research and for further basic research.

The success of the Advancement School's empirical approach, borne out by the demonstrated effectiveness of its programs, represents another important finding for those committed to constructive innovation in education.

The School also carried out several studies on the basis of demographic and psychodynamic data gathered there.

These contributed to program-building and corroborated many of the intuitive judgments which figured so importantly in that process.

The work of the North Carolina Advancement School will certainly be continued:

> 1. On June 30, 1967 the North Carolina General Assembly passed a bill appropriating one million dollars to the State Board of Education for the two fiscal years ending June 30, 1969, "To be used for the operation of the North Carolina Advancement School at Winston-Salem."
>
> "The purpose of the North Carolina Advancement School," the bill states, "is to provide a facility wherein there shall be carried on experimentation and research into the causes of and remedies for underachievement in the public schools of North Carolina."
>
> It continues, "The State Board of Education shall have the responsibility of operating the... School... as a continuing phase of and in conjunction with the public school system of North Carolina."

(Appendices P, Q, and R are documents related to the continuation of the North Carolina Advancement School.)

Information about the Advancement School's continuing program may be requested from:

Dr. John Bridgeman
North Carolina Advancement School
1621 E. Third Street
Winston-Salem, North Carolina.

2. The Charlotte-Mecklenburg County School System has established a Learning Academy, the objectives of which, although geographically limited to that System, are similar to those of the North Carolina Advancement School.

The Learning Academy has already begun operation under Donald Hayes, former Assistant Director of the Advancement School. Several other former Advancement School staff members are also currently employed at the Academy. For further information write the director Mr. Donald Hayes, Box 336, Huntersville, North Carolina 28078.

3. Another group from the School, including its second director, Peter Buttenwieser, contributed heavily to the planning of, and formed the core of the staff of the Pennsylvania Advancement School, a private nonprofit corporation related to Philadelphia's Planning Committee. Its goals are also similar to the North Carolina Advancement School's. For further information write the director, Mr. Peter Buttenwieser, Pennsylvania Advancement School, 5th & Luzerne Street, Philadelphia, Pennsylvania.

4. The instructional programs developed by the Advancement School in science, math and language arts (Appendix S) have been field tested and found effective. Plans for further dissemination are now under discussion.

5. Among several school systems in various parts of the nation which are known to be developing plans for an Advancement School of their own is that of Cambridge, Massachusetts. The Cambridge City Schools recently was awarded a Title III (ESEA) grant to begin an Advancement School there based upon North Carolina's model.

It is the hope of those who participated in the initial three-year phase of the North Carolina Advancement School that educators all over the country will find its contributions useful and that many others will join in the attack on underachievement.

Any further information concerning the first three years of the Advancement School experience may be requested from:

Dr. Gordon L. McAndrew, Director
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1006 Lamond Avenue
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